## November 10, 2004

Mr. Mike Huckleberry 120 South Lafayette Street Greenville, MI 48838

SUBJECT: INQUIRY ABOUT SECURITY AT THE DOW CHEMICAL COMPANY TRIGA

RESEARCH REACTOR, MIDLAND, MICHIGAN (TAC NO. MC 4893)

Dear Mr. Huckleberry:

This is in response to your letter of October 19, 2004, inquiring about security at the Dow Chemical Company TRIGA Research Reactor located in Midland, Michigan. We appreciate the opportunity to discuss our nuclear safety requirements and programs.

Provisions that protect the facility and fuel at the facility provide an acceptable level of protection. The Nuclear Regulatory Commission (NRC) evaluates the safeguards and security requirements considering potential unauthorized removal of radioactive material, including the fuel at research reactors such as the TRIGA Research Reactor at the Dow Chemical Company. Since September 11, 2001, we have specifically reviewed and inspected the Dow Chemical Company TRIGA Research Reactor and found that they meet the post September 11, 2001, NRC security requirements. They have made security program enhancements to protect the fuel, facility and members of the public. The provisions provide a defense in depth approach that has multiple layers of protection.

Your letter ask specific questions about the security arrangements at the Dow Chemical Company TRIGA Research Reactor and the timing of when certain security arrangements were put in place. Because of their sensitivity, we cannot discuss the specific provisions of security at the Dow Chemical Company TRIGA research reactor or the timing of when specific aspects of security were put into place. However, the enclosure to this letter contains general information about security at research and test reactors, including the Dow Chemical Company TRIGA Research Reactor.

Thank you for your interest in this matter.

Sincerely,

/RA/

J. E. Dyer, Director
Office of Nuclear Reactor Regulation

Docket No. 50-264

Enclosure: Research and Test Reactor

(RTR) Security

cc w/enclosure: See next page

CC:

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Office of the Governor Room 1 - Capitol Building Lansing, MI 48913

Stan Dombrowski Chair, Radiation Safety Committee Dow North America 1803 Building Midland, MI 48667

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Test, Research, and Training Reactor Newsletter University of Florida 202 Nuclear Sciences Center Gainesville, FL 32611

## RESEARCH AND TEST REACTOR (RTR) SECURITY

The Nuclear Regulatory Commission (NRC) required security at Research and Test Reactors (RTR) long before the terrorist attacks on September 11, 2001. Following September 11, 2001, the NRC promptly advised RTR licensees to heighten security to protect against radiological sabotage and theft of nuclear material. Subsequently, NRC required RTR licensees to take additional security measures (ASMs). The NRC has verified that appropriate security measures are in place to protect RTR facilities. Further, NRC maintains regular communications with other Federal agencies, e.g., the Department of Homeland Defense, to continue assessing potential threats to all classes of licensees including RTRs.

RTR security requirements are graded. That is, stricter requirements are imposed on RTRs with material that is more attractive for theft or sabotage. The security programs and systems are required to provide for the early detection, assessment and response of unauthorized access or activities. These security programs include control of access to facilities. Licensee security forces are also required to patrol and monitor the facilities. Alarms or other devices or procedures are required to detect unauthorized presence or activities. Licensee security forces are required to respond to all unauthorized penetrations or activities. The security requirements follow a defense-in-depth approach.

After the September 11, 2001, attacks, in addition to licensees heightening security, the NRC sent many advisories to licensees, including RTR licensees. The licensees have reviewed these advisories and implemented ASMs. ASMs include provisions for vehicle, insider, and land-based assault threats. ASMs include, but are not limited to, enhancements to access authorization and controls, communication systems, and vehicle and package searches. The ASMs also include heightened coordination with appropriate local, State, and Federal resources. RTR licensees also established liaisons with the FAA and report unusual overflights or potential threats.

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/RA/

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cc w/enclosure: See next page **DISTRIBUTION**: **G20040706** 

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